In this issue

She says he says

by Bill Schindler, Editor-in-Chief

Okay. Who set up the game of "telephone" amongst XML book authors?

A little over a year ago, I started studying XML by reading the XML Recommendation on the W3C's Web site (www.w3.org). At the time, there was almost nothing else available on XML: A couple Web sites contained some deep technical white papers and the beginnings of some XML tools. There were a few online discussions, and two or three books that everyone agreed were out of date.

As a result, I got really cozy with the recommendation. But the recommendation isn't exactly reader friendly and it's sparse on examples. I was hungry for more.

Then someone gave me an XML book—one of the big prop-up-the-kitchen-table books. "Oh, boy," I thought, "I'm going to get a bunch of inside goodies!" I promptly sat down and started reading. Five minutes later, I threw the book down and started ranting. The book was full of technical inaccuracies! (To check my first impression, I highlighted errors as I discovered them. In the first five chapters, every single page had *at least* one major technical error.)

So, you get a poorly written book once in a while.

Roll forward a year and we suddenly have a flood of XML books on the market. And guess what? Most of those books have gross technical errors. The *same* gross technical errors as the earlier book.

What's that mean? It means that the authors of these books are reading the other XML books without ever looking back at — or understanding — the original XML Recommendation. They're rewriting each other without verifying that what they're writing works or has any basis in reality.

And, like the children's game of "telephone" where the same message is passed from one person to another, changing as it goes, the errors accumulate. Author B misunderstands Author A's misunderstandings who misunderstood Author Y's misunderstandings.

The good news is that there are a few books on XML that are accurate. The bad news is that you have to know XML in order to separate the wheat from the manure. ☺

Phoenix OS/2 Society, Inc

The Phoenix OS/2 Society, Inc (POSSI) is an international organization of computer users with an interest in IBM's OS/2 operating system and related issues.

Letters

This morning, I finally read Esther Schindler's article on Notes and Outlook, and I believe some other pressures are coming into play.

As a bit of background, the office I work in is primarily a Novell network shop, with an increasing amount of Windows NT, some mainframes, AS/400s, AIX, and Solaris, with Notes as the official workflow and mail system. Most of the desktops are Windows. I think I am the only remaining OS/2 user on the floor.

I am currently working on a project to use single signon to simplify the process of connecting to this collection of machines, possibly with biometric recognition as a security feature.

In meetings with management—and we are talking about all the way up to the second person in charge of the company—I am constantly battling the question, "Why don't we just convert everything to Windows 2000, and we won't need any of this other stuff." These are the words of people responsible for company data-processing, and most importantly the budget, but they have only experienced Microsoft in their interactions with PCs. Microsoft is the safe solution, as far as they are concerned, since it is the biggest!

I am certain that many of the folks at the Lotus convention were cheering so that they would not have to once again deal with "Why do I need the Notes client on my laptop? I only use it for email. Why can't I just use Outlook? It comes free with..."

The "It comes free with..." argument has been the demise of many a product. We moved from WordPerfect, shared on the servers, to Word, licensed and installed on each of the desktops (no longer "free with..."). In my case, the push for Microscft came with a change in management. The "It comes free with... " folks that started the trend are managers that came from non-DP business areas, more concerned with short term expenses than the longer term impact.

With the move to Word, we no longer site-license WordPerfect (a data processing expense). Instead, each operating department pays for the individual copies of Word installed on their machines. Is the cost less than the site license? A good question, but a hard one to answer, since our expense accounting is not detailed to that level. However, my own feeling is that it has to be more expensive since we were running 1,000 seats on 500 concurrent licenses (with the use of license monitoring software).

So what are the pressures I see at work? A very short term vision, based on the expectation that Microsoft will continue to give away products (short term financials), and the mistaken belief is that since Microsoft is the biggest, their stuff must be the best.

By supporting Outlook, Lotus is allowing themselves to be pushed off the desktop. Out-of-sight, perhaps a dangerous position to be in.

Jon Vieira

Recommended settings

For DOS and WINDOWS applications to run under OS/2

Tips from IBM's Web site

[It's often difficult to find advice (okay, anything) on IBM's Web site—and you have to know you have a question before you ask one. This document is among the thousands of recommendations online, and it offers good advice if you're running DOS and Windows applications. —Editor]

This document provides the settings for DOS and WINDOWS applications that run under OS/2 and WIN-OS/2.

These settings are for installing or running games:

```
DOS_BACKGROUND_EXECUTION= OFF
DOS_FILES= 100
DOS_HIGH= ON
DOS_UMB= ON
```

```
DPMI_DOS_API= ENABLE
DPMI_MEMORY_LIMIT= 64
HW_ROM_TO_RAM= ON
HW_TIMER= ON
IDLE_SECONDS= 60
IDLE_SENSITIVITY= 100
INT_DURING_IO= ON
```

Windows application installation
Use the Universal settings plus:
```
WIN_RUN_MODE= ENHANCED
```
Try STANDARD if the application requires it.

Tooling around

Three tools to help you stick with OS/2

by Esther Schindler

Most OS/2 users feel a certain amount of pressure to throw in the towel, and adopt a more mainstream operating system. We do use OS/2 in a Windows-dominated world. Aside from comments like "OS/2? Is that still around?" when we interact with other computer users, coworkers and customers make the (statistically understandable) assumption that we use Windows and its most popular applications.

That's as true for me as it is for anybody else. The magazine for which I write has standardized on Microsoft Office, and I receive press releases in Word. Nonetheless, I've managed to do most of my work in OS/2, without irritating or inconveniencing the people I work with. I've accomplished this with the help of a few tools and technologies—which might just help you, too.

RTF to the rescue

Although I write for a living, my word processing needs are very light. I don't need much more than text headings (usually marked with the inelegant SUBHEAD=) because my publishers have staff who are paid to lay out my words in a readable and pretty fashion. But I spend most of the day writing, or reading one document or another, so I need to send files in a format that both I and my correspondents can edit.

It's not exactly that the program, Microsoft Word, is in itself a standard. After all, I'm not affected by my coworkers' choice of user interface, or their preferences for the way the word processor operates. What my correspondents care about is a standard format for the data—the documents—that they exchange with me, and they tend to think that's the format used by the latest version of Word. As long as we can both work on the same document, my correspondents don't care if I'd written the file using a crayon.

If you choose a word processor that can read and write Word documents (as I've been told Sun's StarOffice can do, though I haven't tried it), then maybe you won't have any trouble.

But other word processing formats can be read by nearly any word processor. For example, just about any modern word-processing program worth its salt (from Sundial System's ClearLook for OS/2, to Microsoft Word) can read a file written in WordPerfect 5.1's format. If you export a file as WordPerfect, your correspondent can probably read it, with most of the formatting the way you intended it. Depending on the nature of the people you

correspond with, and how they use the data, HTML might be another way to present your information.

A better choice for document exchange is rich text format (RTF), invented by Microsoft many years ago (long before HTML) with the intention of creating a standard markup language. RTF isn't good for really complex documents with embedded graphics or frames, but it does an adequate job of maintaining document formatting in typical business correspondence such as proposals and memos. Plus, RTF has the added benefit of instant acceptance by Word, as well as many other word processors. If your correspondent edits your WordPerfect document, Word will utter dire warnings to the hapless user, suggesting terrible things will happen and practically twisting her arm to convince her to save the file in Word's proprietary format. With RTF, Word's preferences aren't quite as evident, and you'll probably see the document returned to you in RTF as well.

Because my documents are simple, I don't have any trouble with submitting my articles in RTF, but you may encounter a few problems. For instance, most OS/2 word processors can't deal with Word's revision markings. (Word's well-implemented revision marking features may be the single reason that God hasn't smitten Microsoft the way he did Sodom and Gomorrah.) Describe folds up when it attempts to read RTF files with revision marks. So, RTF isn't a perfect solution—but it does let me write my articles in the word processor and on the operating system I prefer.

Taking a close look

RTF is useful when I have control over the initial document format, but I get plenty of files written by someone else. For example, the public relations industry seems to think that I need to see their releases in fancy fonts and colors, rather than pasting into their email the ASCII text that really matters. As a result, I get plenty of Word files, PowerPoint presentations, etc., many of which are unsolicited.

One application that helps me cope with the deluge is Inso's QuickView Plus, which runs under Windows 9x/NT and Windows 3.1. It runs fine in a WinOS2 session, though of course that limits me to reading documents with 8.3 filenames. That's generally solvable with a quick
`REN LongPressReleaseName.doc Shorter.doc`

QuickView Plus lets me, well, read files. And not just Word, Excel, or PowerPoint files, but just about any file format you can name. I don't have Lotus SmartSuite loaded on any of my computers, for instance, but if someone sub-

4 extended attributes

mits an article for extended attributes in WordPro format, I can read it, copy the article to the clipboard, and paste it into my tool of choice.

QuickView Plus also reads graphics formats, such as AutoCAD or Corel Draw, but I rarely need those. I have enough OS/2 graphic programs that one or another of them can probably read any image file someone sends me, in part because graphic file formats are real standards.

QuickView Plus, available from www.jasc.com/qvp.html, is available in a demo version for Windows 9x/NT, though not for Windows 3.1. You'd have to buy it outright, or you can try the program under 32-bit Windows, where it works almost the same (at least enough to tell if it'll help you). At $59, QuickView Plus is inexpensive, and it certainly keeps me from having to turn to Windows just to read some dratted press release promising me that the company's new mouse pad will revolutionize the industry.

Switch time

But turn to Windows I must, a good portion of the time. While my personal preference remains OS/2, my job as a software reviewer requires that I run whatever operating system the reviewed product supports. That could be Windows, Linux, OS/2, or Macintosh—though it's most often Windows.

I appreciate OS/2's boot manager and the third-party products that followed it. However, over the years I've moved away from multi-partition systems, in which each partition is loaded with a different OS. Aside from the concerns of a given OS' ability to "play well with others," it's a major inconvenience to reboot the computer just to get access to another application—particularly when I don't want to shut down a program running in the active partition.

More and more, that means that I "multitask" by giving each OS its own computer, and I switch between the systems as neces-

sary. I have five computers in my office, running OS/2, Windows 95, Linux, and Windows NT. (The servers and the Macintosh are in Bill's office next door.) The computers themselves take up relatively little room—though heating the office isn't something I ever need to worry about—but having a separate monitor, keyboard, and mouse for each system could take over the joint. And I don't want to admit how often I've rebooted a "hung" computer because I'd been typing on the wrong keyboard.
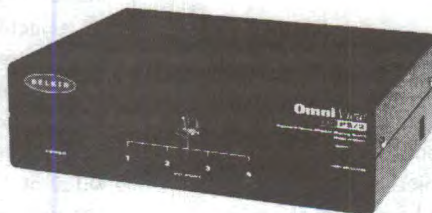
That's why I was overjoyed when Robert "Rosey" Rosenwald, a fellow member of the Phoenix OS/2 Society, turned me on to Belkin's KVM switches. A KVM switch—which means, literally, "keyboard video mouse"—is a black box that lets you share one keyboard, monitor, and mouse among multiple computers. With extension cables, each computer plugs into the back of the Belkin unit. I switch from one system to another with a hotkey combination (Alt+Ctrl+Shift+1, for example, for the Linux system), with a foot pedal, or by pushing a button on the front of the Belkin OmniView model I chose.

The OmniView supports up to four computers, and with add-ons I can extend it to support more systems. If the Macintosh were in my office, I could get another add-on to support the Mac. They have other models, too, which might be suitable for a smaller or larger office. Mine cost about $270 at CompUSA, but that was before I added in all the extension cables.

I'm not 100% pleased with the Omni-View, as the mouse on the Dell refuses to work correctly, so I wound up with a sec-

ond mouse to bat around. Also, if I reboot my ThinkPad, the mouse quits working on the HP Brio. And the company's Web site, at www.belkin.com/products/product_index/kvm/products.html, is among the least well-organized I've seen in a while.

Despite that, I'm happy with the Omni-View because it lets me accomplish things that wouldn't be feasible otherwise. There are other vendors providing similar products. For example, extended attributes co-editor Alan Zeichick is happy with his KVM Systems' Matrix-1, which costs about $600, including cables—far cheaper, he says, than buying multiple monitors.

In particular, if you'll be hooking a notebook computer into the KVM switch, make sure that it can cope with it; another KVM vendor admitted to me that "ThinkPads can be a problem," with their equipment, though Alan says that he's run several ThinkPads (he's a self-proclaimed fanatic, owning five of them), Compaq, Dell, and IBM servers and workstations on his Matrix-1 without a problem.

Back to work

I haven't been able to stay on OS/2 100% of the time, as would be the case in a more perfect world. But between the KVM, RTF, and QuickView, I'm able to spend most of my time working with my favorite operating system. Maybe they'll help you, too. 🖱

Objecting to databases

Creating Object Rexx classes for database access

by Bill Schindler

A couple years ago, I realized that most of the work I was doing in writing database access code in Rexx was low-level code. With checking for errors at every step and tracking database-specific variables, the high level logic of my code was often obscured completely by the lower-level logic necessary to access the database.

So, I decided to move the database access code to an Object Rexx class. My primary design goals were to hide the complex inner workings of database access and to surface a simple and consistent interface.

This article and the ones to follow will show you how I developed a Database class in Object Rexx.

Setting up

For this set of articles on building a Database class, I assume that you're familiar with REXX ("Classic Rexx").

As I discuss examples, I'll touch on how some of the Object Rexx statements work. You should be willing to spend some time studying the Object Rexx documentation to pick up any details that I don't have room to cover in these articles.

In order to actively follow these articles, you need to install Object Rexx. If you're using OS/2 Warp 4, you switch to Object Rexx by going to a command line and running:

```
switchrx
```

You'll be asked if you're sure you want to switch. Some files will be copied, and you'll need to reboot for the switch to take effect.

Any Classic Rexx programs you use should still work. There are two "gotchas" that may affect a Classic Rexx program. You won't encounter these often, but you should be aware of them. First, Object Rexx processes the entire program when it's first run, so if there's a syntax error—even in code that's never executed—you'll get a syntax error without the program ever running. Second, Object Rexx's seek option for the Stream function is slightly different from Classic Rexx.

Note that switchrx also switches the online documentation to the Object Rexx version. Take the time to browse through the online documentation.

The other requirement is a SQL database and Rexx libraries for accessing the database. I use the mySQL database and RexxSQL library for all the examples. Both are freely available from Hobbes, http://hobbes.nmsu.edu.

Something old, something new

Using the old database access routines, producing a simple listing of POSSI members requires about 100 lines of Rexx code. About half of those 100 lines of code look something like this:

```
CALL sqlExec 'DECLARE c1 CURSOR FOR s1'
CALL CheckError 'Declare cursor'
CALL sqlExec 'PREPARE s1 FROM :prep'
CALL CheckError 'Prepare'
CALL sqlExec 'OPEN c1'
CALL CheckError 'Open cursor'
```

That's pretty dense stuff. In comparsion, the code to produce a member listing using the Database class fits an entire program into 16 lines.

```
/* member listing */
possi = .database~new('POSSI')
addr = .addressView~new(possi)
members = .membersView~new(possi)
members~orderBy = 'LASTNAME, FIRSTNAME'
ok = members~first
DO WHILE ok
    SAY members~membernumber~right(4) ,
        members~expiredate ,
        members~firstname members~lastname
    ok = members~next
END
EXIT
::requires "Database.rxx"
::requires "AddressView.rxx"
::requires "MembersView.rxx"
```

Using the database class allows you to concentrate on the program logic rather than fiddling with the details of accessing the database. You don't even need to understand how the database access routines work. It makes the resulting program a lot easier to understand, too!

Requires help

Obviously, most of the inner workings are hidden in other files.

One benefit of using Object Rexx is that you can put common routines into a file and make them accessible to any other Object Rexx program using the ::requires directive.

The ::requires directive tells Object Rexx to look in an external file for more routines and classes.

The definition of the Database class is in database.rxx. Once it's included using ::requires, the Database class and all of its methods are used just like any of Object Rexx's built-in classes.

Code accessed through `::requires` works a little differently from external routines that you might have used in Classic Rexx. An external routine can only receive and return simple string parameters. Routines accessed via `::requires` can take anything as a parameter and return any type of object.

Take a message

If you've never seen Object Rexx code before, you're probably wondering, "what's with all those tildes?"

Well, first thing, they're called "twiddles" by Object Rexx programmers.

Twiddles are a new operator used to pass messages to objects and classes. An Object Rexx message is implemented by a method—a routine that's part of a class definition. Methods are used to "do stuff" with an object.

For example, in Object Rexx strings are objects. So, you can pass a string a message. If you want to center the string "Hello" in a 60 character wide space, you could do this:
`"Hello"~center(60)`

Twiddle sends the message "center" to the String object "Hello." (Or you can also think of it as twiddle calling the String object's "center" method.)

First steps

Now that you know some Object Rexx basics, let's start building the Database class.

The code listing for the first part of the Database class is on the next page. All of what follows will go into a file named "database.rxx." The file extension isn't important; you could use ".cmd" if you like. I deliberately pick a non-executable extension so that I can easily pick out the supporting code from the actual runnable programs.

The file starts with the usual Rexx comment. For now, we'll skip over the Check-SQLError routine on line 7.

To create the Database class (listing line 28), we use the `::class` directive. The

::class directive tells Rexx that we're defining a new class. "Database" is the name of the class. The PUBLIC option makes the class visible outside of this file. If we don't use PUBLIC, the class is private to the file and cannot be used by other programs.

Everything following the ::class directive—up to the next ::class directive—belongs to that class.

When it's created, a new Database object needs to set up some variables, get access to the database, and so on. Object Rexx calls a special method named "init" when a new object is created. The init method is invoked when the new message is sent to a class to create a new object. (In the earlier code sample, .database~new('POSSI') is creating a new database object.)

You use the ::method directive to create a new method.

I wanted to keep the interface simple, so the only thing I pass to the init method is the name of the database. It would be very simple to change it to also require the user and password information as parameters (via init's USE ARG) rather than embedding that information in the class.

When an object is no longer needed, Object Rexx calls the uninit method and then deletes the object. The Database class needs to define an uninit method in order to release any database resources that were acquired in the init method.

Catching errors

The CheckSQLError routine (line 7) is used to catch and report SQL errors. Since the Database class may be used in a visual Rexx application or a command line utility, errors are sent to both a log file and to the standard error output.

CheckSQLError is defined using the ::routine directive. Since the PUBLIC option isn't used, the routine is private to the database.rxx file. It's kept private because CheckSQLError is a support routine for the Database class and isn't intended to be part of Database's public interface.

Notice the use of Object Rexx's Stream class (lines 11–18) for appending to the log file. Using the Stream class instead of the older Classic Rexx functions makes the code easier to read and understand. You can scan down the left side of the code and immediately see which file is being accessed. It's also dead easy to close the file—and closing the file is important in any environment where the file may be shared between programs.

Up next

The Database class doesn't do anything useful yet. It just connects and disconnects from the database. In the next article, we'll look at how Object Rexx stores data in classes and add some real functionality to the Database class. 🌀

Listing 1. Database.rxx

```
 1: /*=============================================================
 2:  * Object REXX interface to MySQL database
 3:  */
 4:
 5: /*--------------------- CheckSQLError ---------------------
 6:  */
 7: ::routine CheckSQLError
 8:   USE ARG str, SQLCA.
 9:   IF SQLCA.SQLCODE <> 0 THEN
10:    DO
11:      log = .stream~new("sqlerror.log")
12:      log~open('Write Append')
13:      log~lineout('-'~copies(10) Date() Time())
14:      log~lineout('"'str'"' '('SQLCA.SQLCODE')')
15:      log~lineout('>>>' SQLCA.SQLERRM)
16:      log~lineout('>>>' SQLCA.SQLTEXT)
17:      log~lineout('')
18:      log~close
19:      .error~lineout('"'str'"' '('SQLCA.SQLCODE')')
20:      .error~lineout('>>>' SQLCA.SQLERRM)
21:      .error~lineout('>>>' SQLCA.SQLTEXT)
22:      RAISE HALT
23:      EXIT
24:    END
25:
26: /*********************** Database ************************
27:  */
28: ::class Database PUBLIC
29:
30: /*========================= init =========================
31:  */
32: ::method init
33:   EXPOSE dbName dbId sqlca.
34:   USE ARG dbName
35:   CALL RXFuncAdd 'SQLLoadFuncs','rexxsql','SQLLoadFuncs'
36:   CALL SQLLoadFuncs
37:
38:   dbId = 'c' || random(1, 99999)
39:   CALL SQLConnect dbId, 'user', 'password', dbName
40:   CALL CheckSQLError 'CONNECT' dbName, SQLCA.
41:
42: /*========================= uninit =========================
43:  */
44: ::method uninit
45:   EXPOSE dbId sqlca.
46:   CALL SQLDisconnect dbId
47:   CALL CheckSQLError 'DISCONNECT', SQLCA.
48:   CALL SQLDropFuncs
```

The WarpTech report

by Craig Greenwood <captain@warptech.org>

In the last month, I have become really excited about how WarpTech is coming together. And, frankly, I'm beginning to feel a bit bummed that I won't be able to attend many of the sessions myself. If you have visited the WarpTech Web site, at www.warptech.org, you will see what a great lineup Esther has put together (not that I'm surprised).

We have had a number of people step up and volunteer to help out with several key roles, and they have been putting forth a whole hearted effort to do a quality job. For example, Peter Skye and Daniel Goggia have been cranking out promotional announcements which have had real, measurable results. In fact, hits to the Web site increased twentyfold after one announcement went out last week.

Speaking of the Web site: it has been an intense project for Bill Schindler and Mike Willmoth to get it to the condition that you see it in now. And they have patiently put up with a dozen of us who have been continually suggesting changes, sometimes on a daily basis.

You may remember that, last month, I mentioned that we needed someone to head up the project of making CDs of the proceedings for all the attendees to take home. Well, we just had Frans Morre volunteer to help out. He didn't just say "OK, now what do you want me to do?" but instead he immediately made a list of the questions that had to be resolved: How should the speakers hand in their materials? In what format should we require them? How can we automate the data collection process? Where can we get the CDs

duplicated?—and a whole lot more. It takes several email messages, coordinated with quite a few core volunteers, to decide what will be the best answer for the conference. And, amazingly enough, Frans is doing all of this from his home in Belgium.

Many other people are giving up their personal time to arrange the exhibit hall, set up a network, make travel easier for the out of town guests, and so on. These many volunteers are doing what it takes to make WarpTech the success it is destined to be.

We have another registration deadline looming on the horizon. So, if you have been putting off sending in your registration, don't wait too long. We don't want anyone to miss out on what could be the most significant OS/2 event you have had the opportunity to attend. 🌀

WarpTech registration

Last month to get the "early bird" discount rates

The Phoenix OS/2 Society, Inc is creating a special three-day technical event for OS/2 Warp users, developers, and vendors. The event will be held at the world-renowned Wigwam Resort in Litchfield Park, Arizona, USA (near Phoenix) over Memorial Day weekend.

Technical sessions are scheduled to cover the gamut from home to corporate users and from novices to software developers. Among the sessions you'll find:

- Software development
- The Internet and e-business with OS/2
- The guts of OS/2
- Connectivity and cross-platform issues
- The OS/2 marketplace
- Tips and tricks

Check the WarpTech Web site at www.warptech.org for a full list of sessions.

If you're an OS/2 user, developer, or vendor, this is an event you do not want to miss! To sign up, cut out or copy the form below, fill it in, and mail it to the Phoenix OS/2 Society with your check or credit card information.

The Wigwam Resort is offering a discount room rate of $99/night for WarpTech attendees. To reserve your room at this rate, call 800-327-0396 and mention WarpTech.

WarpTech
Memorial Day May 26–28, 2000
Registration
Wigwam Resort ▮ Phoenix, AZ

Today's date _____

Please use one form per registrant

Name [Last, First I. (Nickname)] _____

Address 1 _____

Address 2 _____

City _____   State/province _____

Zip code/postal code _____   Country _____

Phone _____   Email _____

Member # _____

Rates for full three days (includes luncheon)

1 January to 30 April 2000: ❑ $120.00 POSSI member   ❑ $130.00 nonmember
1 May 2000 to event: ❑ $130.00 POSSI member   ❑ $140.00 nonmember

Daily rates (includes luncheon)   ❑ Friday ❑ Saturday ❑ Sunday

1 January to 30 April 2000: ❑ $69.00 one day   ❑ $89.00 two days
1 May 2000 to event: ❑ $79.00 one day   ❑ $99.00 two days

Luncheon only ($25.00/day)   ❑ Friday ❑ Saturday ❑ Sunday
Names of additional luncheon guest(s):

❑ I am a member of the Phoenix OS/2 Society
❑ I wish to join the Phoenix OS/2 Society now and take advantage of the member discount (enclose a completed membership application)
❑ I need vegetarian meals
❑ Do not send me WarpTech announcements via email
❑ I am interested in information about evening activities and excursions around Phoenix
❑ Please contact me about exhibiting at WarpTech
❑ Please contact me about volunteering to help at WarpTech
❑ Please contact me about advertising

Check enclosed for $_____ OR Charge my ❑VISA ❑Mastercard ❑Discover ❑American Express
Make payable to Phoenix OS/2 Society, Inc

Expiration date ___ / ___

Refund Policy
Refund shall be the paid registration amount less $10 until March 1, 2000. Thereafter, an additional $25 per registered day shall be non-refundable.

Card # _____

Signature: _____

Fax the completed form to 1-480-502-5560 or mail it to the address below.
Phoenix OS/2 Society, Inc ▮ 5515 N 7th St, PMB 5-133 ▮ Phoenix, AZ 85014-2531 ▮ USA

The hard disk world according to Dick

by Esther Schindler

When Dick Krueger, the president of the Phoenix OS/2 Society, agreed to be the presenter for the April general meeting, I told him that I'd need an article describing what he planned to talk about. I warned Dick that, if I didn't get an article from him and I had to write the article myslef, he'd be beholden to present whatever *I* promised.

As Dick didn't get his article written in time, you can now expect the Phoenix OS/2 Society's April general meeting, held at 7:00pm on Tuesday, April 11, to include:

- Dick dancing in a tutu
- Dick walking barefoot on live coals
- a slide show from Dick and Sue's last vacation...

Or, most likely, Dick will try to avoid those subjects by talking about using hard disks with OS/2. I bet that, in his embarrassment about the tutu (pink is *not* his color) he'll try to bring the discussion around to subjects like these:

- partitioning tricks with other operating systems,
- choosing between boot manager or the two commercial alternatives (from PowerQuest and V Communications)
- coping with large hard disks and OS/2

But I recommend you bring your camera, just in case.

When and where

We'll meet at the usual time and location: Tuesday, April 11, at Camel Square (44th Street and Camelback). The general meeting gets underway but our "Random Access" Q&A session starts at 6:30 (though Dick may be too busy lacing his ballet slippers to be able to run it, this time).

We're sure to have an after-meeting meeting at our new hangout, Garcia's Mexican restaurant. Somehow, I expect to hear Dick promise that he'll never again miss an article deadline, ever again. ☺

what
- ▶ Hard disks and OS/2

where
- ▶ Camel Square
  44th Street & Camelback
  Phoenix, Arizona

when
- ▶ Tuesday, April 11, 2000
- ▶ 6:30pm: Q&A session
- ▶ 7:00pm: Regular meeting
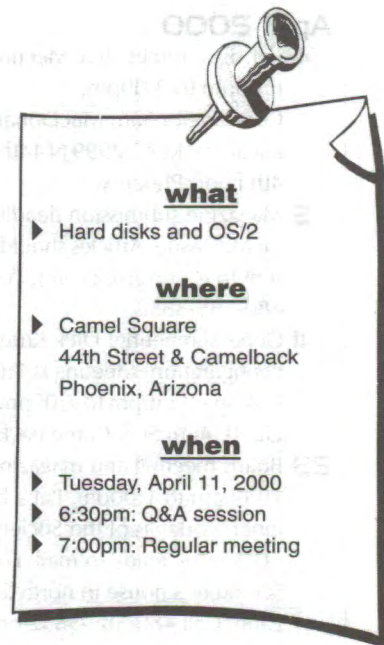
DOS application installation

Use the Universal settings.

Games

Use the Universal settings plus:
```
VIDEO_8514A_XGA_IOTRAP= OFF
VIDEO_WINDOW_REFRESH= 600
```
If the game still does not start, try placing an asterisk (*) the path of the setting, and /C in the parameter field;then add the path and execution file for the game.

Communication program installation

Use the Universal settings plus:
```
COM_DIRECT_ACCESS= ON
COM_SELECT= COMx
```
(x is the number of the COM port.)

These settings should get most applications and games to work or install under OS/2 Warp. They are particularly useful for installing America Online, ProComm, and Winfax Pro under WIN-OS/2. ☺

Coming events

A list of events scheduled by the Phoenix OS/2 Society and other OS/2 user groups.

April 2000

4 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Sam MacDonald. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

5 Magazine submission deadline for May issue. Articles should be sent to editor@possi.org. For other arrangements, call 480-585-5852.

II General meeting; Dick Krueger on hard drive configuration. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Camel Square, G250, 44th St & Camelback, Phoenix.

29 Board meeting and magazine prep. Meeting is 10:00am to 1:00pm. Eat a brunch, learn about the inner workings of the Society, and help get extended attributes ready to mail. Location: Bill and Esther Schindler's house in north Scottsdale, 9355 E Mark Lane. Call 480-585-5852 or send email to esther@bitranch.com for directions.

April

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

May 2000

2 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Sam MacDonald. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

5 Magazine submission deadline for May issue. Articles should be sent to editor@possi.org. For other arrangements, call 480-585-5852.

9 No general meeting—we're busy preparing for WarpTech.

26 WarpTech begins. The WarpTech conference runs May 26–28, 2000 (Memorial Day weekend). For more information, see www.warptech.org and the application form on page 10.

27 Board meeting and magazine prep (at WarpTech).

28 WarpTech ends.

May

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1	2	3	4	5	6	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

June 2000

5 Magazine submission deadline for May issue. Articles should be sent to editor@possi.org. For other arrangements, call 480-585-5852.

6 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Sam MacDonald. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

I3 No general meeting. Instead, we'll have a FOOBAR (Friends Of OS/2 Barbeque And Revelry), probably June 10, at a location to be announced. It will also serve as a "thank you" party to the WarpTech volunteers.

24 Board meeting and magazine prep.

June

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

July 2000

4 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Sam MacDonald. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

5 Magazine submission deadline for May issue. Articles should be sent to editor@possi.org. For other arrangements, call 480-585-5852.

II No general meeting—taking the summer off.

29 Board meeting and magazine prep.

July

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

August 2000

I net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Sam MacDonald. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

5 Magazine submission deadline for May issue. Articles should be sent to editor@possi.org. For other arrangements, call 480-585-5852.

8 No general meeting—taking the summer off.

26 Board meeting and magazine prep.

August

| S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Meeting locations

Directions to meeting locations.

General meetings are held at the Camel Square office complex, Room G250, 44th Street and Camelback (northwest corner), Phoenix.

From the Red Mountain Freeway (202), exit at 44th Street and go north $3\frac{1}{2}$ miles. From the Squaw Peak (51), exit at Colter (southbound) or Highland (northbound); follow signs to Camelback Rd and go east $3\frac{1}{2}$ miles.

The "How OS/2 Works General Interest Group" and the Internet SIG (net.sig) meet at Knowledge Development Center, 2999 N 44th St, Suite 400. That's just north of Thomas, in the building with the green dome. Plenty of free parking is available in the garage behind the building. ☺

If the mailing label on the back cover says "sample" then this may be the only copy of *extended attributes* that you will ever receive. If you want to keep getting the magazine (and receive all the other benefits of membership), you must join! A 12 month membership in the USA is only $30. (See the form for membership pricing in other areas.) Tear out the applica-
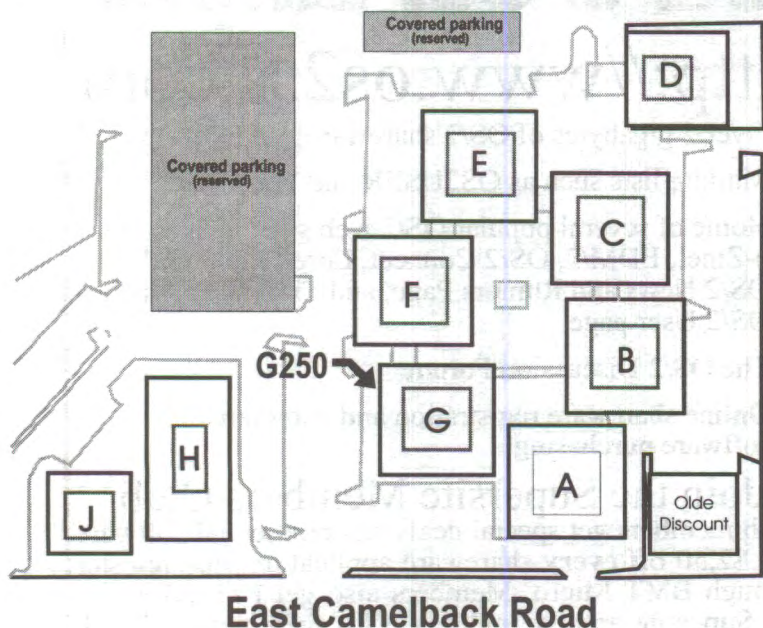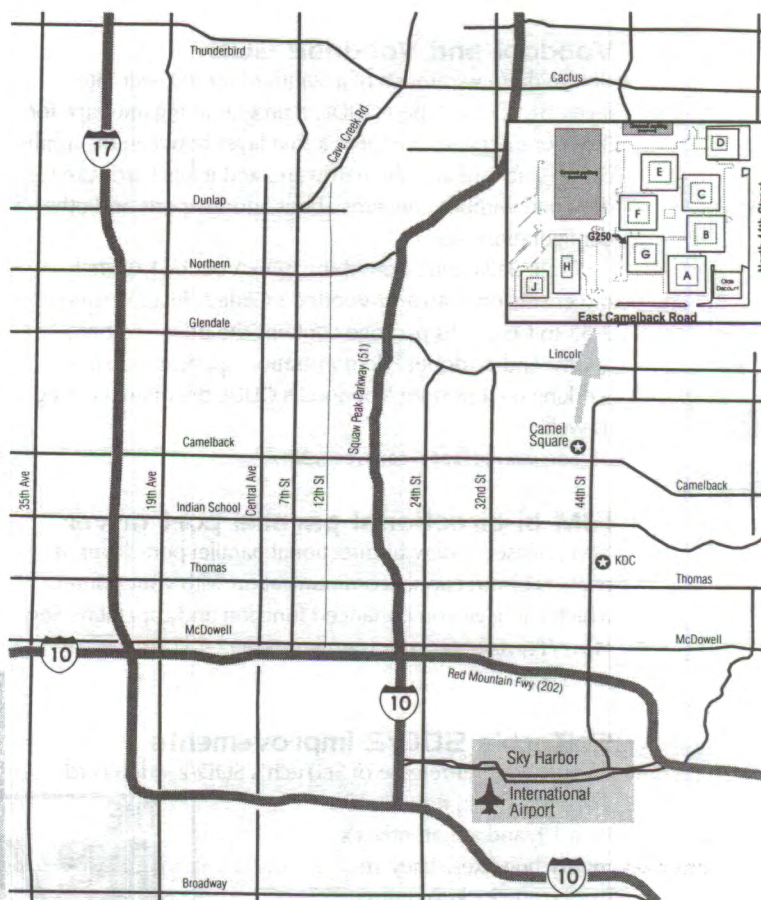
A map of Camel Square, the new location for the Society's monthly general meeting. We will be meeting in room G250. You may park anywhere except in the reserved (covered) parking spaces.

In the driver seat
New support for your OS/2 hardware

by David Wei, davidwei@cybermail.net

Voodoo1 and Voodoo2 GLiDE

Before there was much of a standard for 3D user interfaces, 3Dfx developed GLIDE, a programming interface for 3D user interfaces. GLIDE is a thin layer between the application software and the hardware, and it lets hardware be designed without concerns about address ports and other configuration issues.

Craig Ballantyne ported the 3Dfx Voodoo1 Glide2 driver version 2.46 and Voodoo2 Glide2 driver version 2.53 to OS/2. His package contains the driver, test programs, and a "donut" demonstration application. He's working on a port for Voodoo3's GLIDE driver are coming as well.

See `www.guisoft-corp.com/3dfx`.

IBM bi-directional parallel port driver

IBM released a new bi-directional parallel port driver. It enables bi-directional communication with your printer, which can give you enhanced function and capability. See `ftp://ftp.boulder.ibm.com/ps/products/os2/os2ddpak/bidi.exe`.

SciTech's SDD/2 improvements

There's another release of SciTech's SDD/2 video card driver for OS/2, now up to Beta 19, and apparently it's mostly bug fixes. They've fixed some lockup problems with S3 chip sets, re-incorporated OS/2's native BIOS function (which should help some ATI mobile chipset LCD display problems), and fixed multiple screen fletching and corruption problems on certain cards. This build has fixes or updates for Cirrus Logic 543x/4x chipsets, earlier Matrox boards and Intel i740 chipsets.

You can find the SciTech Display Doctor Beta 19 can be downloaded at `ftp://ftp.scitechsoft.com/sdd/beta/os2/sdd-os2-7.0.0-b19.exe`, or just look at the changes at `www.scitechsoft.com/sdd2_changes.txt`.

But first, you might want to note that a special IBM edition of SciTech Software's SDD/2 has been released. This version is licensed, through IBM, for all OS/2 users to use freely. It is almost identical to the standard SDD/2. The main difference is that IBM Special Edition's resolution selection is limited to 640x480, 800x600, 1024x768, 1280x1024 and 1600x1200; the standard version allows you to select all kinds of standard and weird resolutions. See `ftp://ftp.software.ibm.com/ps/products/os2/os2ddpak/sddse700.zip`.

DaniS506 IDE Driver

Daniela Engert updated her IDE/ATAPI driver again. This version permits ATAPI based CD-R/CD-RW drives to be viewed by the system as a SCSI device. That lets you use an IDE based CD-R/CD-RW drive with CDRecord/2 for OS/2. Plus, other ATAPI device on the system can now be accessed by OS/2's ASPI software interface. See `http://hobbes.nmsu.edu/pub/os2/system/drivers/storage/daniatapi.zip`, `http://hobbes.nmsu.edu/pub/os2/system/drivers/storage/danis506.zip`. 𝕨

Learning about printers from Lexmark

by Joel Frey

by Joel Frey

At the Phoenix OS/2 Society's February general meeting, we enjoyed a presentation by Lexmark. Two Lexmark employees talked with us about their hardware and company position: David Kring, from sales, and Henry, whose last name I never caught because I was so busy looking at the network laser printer they brought along. Henry covered the technical side of our questions, demonstrating his extensive experience with the company's current and previous products.

Lexmark's market position

Lexmark, which spun off from IBM in 1991, just completed its first year in the Fortune 500 at number 486. According to David, Lexmark's advantage over other vendors is that it they design and build their own hardware (in most cases) so they can react faster to market demands. Although Hewlett-Packard has 67% of the printer market, and Lexmark is number two at 13%, Lexmark has a 90+% share of some specialized markets, such as drugstores and banks, because of their printers' ability to produce labels for prescriptions and MICR printing.

According to David, Lexmark continued to produce all of IBM's printers until 1995, when IBM switched to Xerox for their low-end (under 12ppm) printers. They also win more awards than any other printer company.

In spite of the common wisdom that offices are becoming increasingly paperless, David pointed out that 95% of business documents are still on paper and there is a 20% annual growth in pages. He gave a statistic for the number pages (in millions) per $1 billion of revenue that businesses produce, but unfortunately I can't locate that number on my tape of the meeting. Fifty-five per cent of network traffic, he says, is generated for printers.

So what about the printers?

Lexmark's printers range from low-end ink-jets for consumers through high-end color lasers. They do not currently make any large-format devices (for plotters, etc.). Lexmark also makes internal and external print servers.

Lexmark also produces dot-matrix printers. That might seem archaic, but they have the advantage of being able to print multipart forms. Yet, newer printers can have the ability to flash a preprinted form for multiple copies with less noise and faster speed. Many of the Lexmark printers have OS/2 drivers.

The primary difference between network and non-network printers is that network printers have built-in RIPs (raster image processors). The RIP converts the printer data to an image composed of horizontal rows of pixels. It's the lack of a built-in RIP that makes a direct connection between the PC and a low-end printer necessary, since the PC's processor and print drivers perform the rasterization.

Although it's possible to use a non-RIP printer as a network printer, doing so requires a print server that can handle bi-directional traffic, or a separate PC acting as a print server, to perform this task for the clients. Only high-end inkjets are networkable for this reason; the lack of a RIP is part of the reason for the low cost of consumer inkjets.

Another difference between printers at different price points is whether the paper is fed from an upright or tray feeder. Although tray feeders are less prone to jamming (and less sensitive to variations in humidity in their enclosed forms) the upright feeders have a smaller footprint, which can be a selling point.

David provided a tip sheet from their technical support people for using Lexmark printers and a separate one for OS/2 printing via the TCP/IP pipe port. You might be able to find these on their Web site at www.lexmark.com. Esther commented that Lexmark's site is a good one for finding drivers. Others pointed out that Lexmark provides live technical support from 9:00am to 9:00pm EST, and that the assistance is truly helpful. (¼)
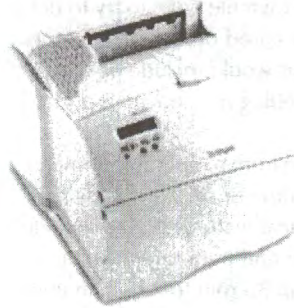
Color scanners for OS/2 Warp

by Ira N. Saxe <isaxe@attglobal.net>

With color scanners becoming more economical, I began to wonder if color scanning was practical under OS/2. Eventually, it became a challenge: Could I make a color scanner work on my IBM Aptiva (Model SE7, Type 2139)? And, if I could do so, could I share my success, with other OS/2 users?

Happily, the answers were Yes. Here's what I learned.

Desired features

My first step was to create a list of what mattered: I needed a scanner and OS/2 software to drive it. The combination needed to include support for common graphic formats, such as Graphics Interchange Format (GIF), Tagged Image File Format (TIFF), and Joint Photograph Expert Group (JPEG) format. I also wanted my scanner/software combination, when faced with an unknown file type, to try to determine the correct image format based on the file contents.

Ideally, the software support would include optical-character recognition (OCR), letting me convert a printed page into computer text.

The color scanner should be from a reputable company, with adequate capability for home or small business use, and priced under $300. Optional features should include an automatic document feeder and transparency unit, which would enable me to scan 35 mm to 4×5 inch negatives or transparencies.

I preferred a Universal Serial Bus (USB) connection over the Small Computer System Interface (SCSI); based on my research, it's more capable and costs less than a SCSI adapter. A prerequisite for success would be an OS/2 driver for the connection type whether SCSI or USB.

Software options

I found only two OS/2 image processing products available for purchase: PMView/CFM TWAIN bundle and Impos/2. Both programs give excellent scanning control, and have viewing and editing control for bit mapped color and grays.

Neither program includes OCR, but both applications provide the images for an OCR converter, and I will try to find such an OS/2 program.

Impos/2 has better image editing capabilities, though at a higher price. Only Impos/2 supports two SCSI attached scanners, if they're needed.

For scanning, viewing, and converting, both programs seem excellent, with CFM TWAIN/PMView at a lower price. Both programs provide variable image settings, such as rotation, mirroring, brightness and contrast, hue and saturation, red-green-blue color balance, inversion (i.e. make

a negative), and color conversion. In addition, Impos/2 includes editing tools, such as brush, line tool, airbrush, flood fill, clone, color swapper, eraser, and sponge.

I'm happy to have them both and will probably use both applications to learn more of their features.

For example, one nice CFM TWAIN feature shows you the scanned file size that will result from the selected size and dpi resolution. You won't create a 25MB file without warning. On the other hand, PMView creates thumbnail icons of the image files in a directory, which can be selected via a mouse. I like both of these applications.

The search

At www.pc.ibm.com, I found a listing of hardware interfaces for my Aptiva 2139, confirming that it does USB and does not have a SCSI controller. At the same site, a document for the Netfinity 5000 server provided a good description of a USB port and its four electrical connections.

Indelible Blue Inc. (www.indelible-blue.com) listed one OS/2 compatible scanner, the Hewlett Packard 6250Cxi, a color flatbed scanner for $444. They listed Impos/2 as the only OS/2 supporting program, for $169.

The IBM OS/2 Device Driver Pak On-Line service, at service.software.ibm.com/os2ddpak/html/index.htm, included an OS/2 scanning solution, the software PMView/CFM TWAIN Bundle, from BMT Micro. The bmt-micro.com site listed this solution, for $79.99, as needing a SCSI interface. It listed the supported scanners, none of which are presently shipped by the leading scanner manufacturers.

The IBM OS/2 Device Driver Pak On-Line identified CFM Computer of Germany (www.cfm.de and support@cfm.de) as the source of CFM TWAIN, the SCSI driver for the above scanning solution. In answer to my query, CFM said that they have no intention of developing a USB TWAIN driver. Since I found no other OS/2 scanner solution, I decided to accept their SCSI solution, and purchased the PMView/CFM TWAIN Bundle, at $79.99, from BMT Micro.

PMView 1.05 is the latest update (at this writing), of the application I've used for viewing images. Available from www.pmview.com, it supports about 30 image formats, many of which are beyond my present knowledge. This version supports an interface with the CFM TWAIN software, which controls the scanning. Presumably version 2.0, expected shortly, is equally capable—if not more so.

Many color scanners are listed in the various catalogues. The problem is to find one with OS/2 support. I finally con-

centrated on the ones recommended in *PC World* in October and November 1999, and bought their first choice for a SCSI connection from Epson, at $299.95, the Perfection 636. It includes an Adaptec AVA-2902E/I PCI-to-SCSI adapter card, which seemed to solve my concern for the lack of this interface.

The OS/2 SCSI driver

I installed the Adaptec card in my Aptiva SE7. The IBM OS/2 Device Driver Pak On-Line led me to Adaptec drivers. I downloaded and tried several of their drivers. I ended up using their AIC7870.ADD driver in C:\OS2\BOOT and added
`BASEDEV=AIC7870.ADD /V`
to the CONFIG.SYS.

Installing the PMView/CFM Twain bundle was accomplished without problems. However, the CFM TWAIN and PMView programs returned "Scanner not ready! Check your scanner" at any attempt to acquire an image from the Epson scanner.

This is the "I took the wrong fork and it cost me" paragraph that you may want to skip. Thinking this was a problem related to the adapter driver or SCSI card problem, I

asked Adaptec support for help. They responded that card AVA-2902E/I is special for and supported only by Epson. Next, they suggested using their AVA-2910C at $109.99. But, this card had just been discontinued. Several mail order companies had ten-packs of the card (too costly for me). The next alternative was their AHA-2940 Ultra card, which I bought from PC Connection for $219.95. It is supported by the same driver, the AIC7870.ADD. I needed a new SCSI cable, however, because of connector differences, but such things seem to happen. Unfortunately, the

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same problem remained for the CFM TWAIN and PMView programs. (I should add that Adaptec support was helpful and answered each inquiry.)

At this point, failure was staring in my face. I bought the Impos/2 program as a possible salvation.

Yeah! it works!

After program installation, you use Impos/2's main menu to install or change the supplied device drivers. The Installation manual is adequate, but you need to enter the directory where you put the program. Also, you need to enter the new driver directory of the CD-ROM (e.g., H:\CDINST \US). Then, you choose the driver and the scanner's SCSI ID. Finally, you enter your chosen name for each scanner. I chose the GT-9500 as my Epson scanner, which works.

Impos/2 includes scanner drivers for IBM, Epson, HP, Mustek, Microtek, Ricoh and OBIS. For other scanners, ask imposup @attglobal.net or Indelible Blue.

Impos/2 drove the Epson scanner without any problem. This caused me to suspect a CFM TWAIN problem, rather than the SCSI card and its drivers. So, I asked CFM for help. I followed their instructions to add the following to scanner.ini:

```
[Perfection636]
Driver=EPSON
AltVendor=Epson
AltDevice=Perfection 636
```

Later, I reinstalled the SCSI card that came with the Epson scanner—and it works fine. Thus, I wasted almost $300 for an unneeded adapter card and cable. Live and learn.

Scanning images

To scan from PMView, you choose Acquire, which starts and scans via CFM TWAIN. The CFM TWAIN scanner page menu has plenty of choices. You can scan just an Overview, Prescan, Finescan, and Finescan to Clipboard. Settings control whether the image is captured in grayscale, line art (also used for OCR), 256 colors or true color (RGB). Analog resolution ranges from 30 to 2000 dpi. There are twenty size settings, several input/output choices, filtering, and noise reduction. Plus, you can scan in negative or mirrored images, and adjust brightness and contrast at scan time.

Impos/2 does quite a bit beyond scanning. You can capture the PC screen, or edit images with 24 tools—from creating a rectangle to a tool that measures the distance and angle between two points.

Impos/2's scanning options include Preview and Scan. Settings range from grayscales to 24-bit color. You can control the horizontal and vertical resolution, as well as sharpness, brightness and contrast. Impos/2 shows the file size that will result from the current size and dpi resolution, and it also shows the picture size in horizontal and vertical pixels. These values change when you adjust the scan window, a rectangle that you adjust with a mouse to scan only a portion of a page.

The Impos/2 User's Guide is excellent. It clearly describes your options and actions and, importantly for me, image processing basics. No user's guide came with PMView. But its menus are very good.

Final words

I believe the Epson scanner with either the Impos/2 or CFM TWAIN PMView program is a good choice. I am now productively using both of them to scan pictures of relatives and ancestors to include with my genealogical file. 🙂

Ira Saxe has a EE from VMI, class of 1939. He was a WW2 officer in Signal Corps. and an IBM engineer from 1955 to 1990, with assignments starting

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Products discussed

Epson Perfection 636
From Epson at $299.95 or any mail order company
www.epson.com/cam_scan/scanners/perfection636
(Note: Epson may have dropped SCSI scanners lower than the 1200S. If the link doesn't work, try going to Epson's home page and following links for scanners.)

Adaptec AVA-2902E/I PCI SCSI adapter
(Came with the color scanner)
www.adaptec.com

Adaptec AHA-2940 Ultra PCI SCSI adapter
PC Connection at $219.95 or from Adaptec

AIC7870.ADD driver
Free download from Adaptec.
www.adaptec.com

Impos/2
From Indelible Blue at $169.00
www.indelible-blue.com.

PMView/CFM TWAIN
From BMT Micro at $79.99
www.bmtmicro.com

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in logical circuit design for Sage (vacuum tubes) air defense system and ending with 30 years in space related system engineering/management from Mercury to Space Shuttle. Presently, he programs in Clipper for a network based DOS system for his son's metal fabrication company. He's used OS/2 since it was first available to IBM employees.

Power Listviewer

by Craig Greenwood

Not long ago, I changed my POSSI discussion list subscription from "individual messages" to "digest format" so I wouldn't be so overwhelmed by the number of messages in that mail folder. The digest format reduced the number of messages coming in, but I couldn't scan subject lines to pick and choose the messages I wanted to read.

Instead, I needed to open each digest, read the "In this issue" list of subjects, and scan the full document for the messages I wanted. When I learned about Power Listviewer, I immediately recognized its usefulness for, as the name implies, viewing lists. After you read about it, I think you will too.

My sort of power

Power Listviewer 1.06 (PL) makes it easy to view message digests and mailing list messages, primarily by sorting and threading individual messages. But remember, it is called "Power" Listviewer, and this utility does have power. Not only does PL let you view messages, but you can use it much like a well equipped email client to post follow-ups to lists, reply directly to a message's author, or both. You can also forward a message or write a new one.

The initial PL display is a three-pane view, showing the thread tree, the dates and times of the messages in the selected thread, and the message text. An icon in the thread tree changes color to indicate if you've read a message.

This is useful as is, but when you double-click on one of the listed messages, a dedicated message window open with the selected message displayed. This message window has its own button bar with options for replying/posting and for navigating forward and backward through the messages and threads.
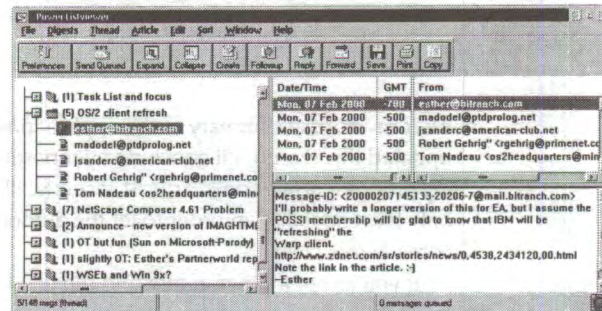
One of the features I find quite handy is a "Find" tool, capable of searching all of the listed messages for a combination of included or excluded elements. For example, I can look in the message body for "WarpTech," except in messages where the subject includes "exhibitor registration."

Other notable features include support for ROT 13 encoding/decoding, and the capability to strip HTML from messages. I was unable to test the latter, because I found that POSSI members who post to the discussion list are far too polite and considerate than to post messages in HTML format.

(ROT 13 is an elementary cipher process which ROTates the alphabet 13 places. Presumably this is useful in forums where someone might not want to accidentally view some type of "spoiler" information such as the plot to a movie they haven't seen. "I was amazed when I found out that Darth Vader is Luke's father!" would look like "V jnf nznmrq jura V sbhaq bhg gung Qnegu Inqre vf Yhxr'f sngure!")

I have developed an efficient system using Power Listviewer. I set up a sub-folder in my email client, called "Reading," and drag several POSSI digests to that folder. I specified a shortcut in Power Listviewer to open the "reading" directory. When I have finished gleaning tidbits of valuable information from this message collection, I close Power Listviewer and go back to my mail program. I mark those digests in the "reading" folder as read, and drag them to a storage folder or delete them. This works just as well with a batch of individual files, too. While it works on Warpcast messages, it's less useful, since Warpcast information is not posted in threads.

Some mail list digests don't work with Power Listviewer. For some reason Power Listviewer was unable to detect individual messages within some digest messages. I encountered this with a list for magicians.

Technical support responded quickly to my few questions. The program is not keyboard enabled much, beyond moving to the next or previous message or thread, but those are probably the most common operations. Also, Power Listviewer is not set up to delete messages; I suspect this is because email clients vary in the way they inventory messages.

Power Listviewer has become one of my frequently used utilities. If you subscribe to any lists which generate much volume at all, I am confident that you will find it worthwhile too. ☻

Craig Greenwood is a father of three, and husband of one. He is a charter member of POSSI and is currently the figurehead for WarpTech, a special three-day technical event for OS/2 Warp users, developers, and vendors, May 26-28 at the lovely Wigwam Resort outside Phoenix, Arizona (www.warptech.org).

New and improved

compiled by Esther Schindler

After my normal summary of the applications released and updated this month, I'll conclude by reposting an interesting proposal posted on Warpcast recently. I'll edit it lightly, only for readability, in order to let the author's message come across clearly.

If you're not a programmer and the text loses you, feel free to skip that section, and devote your attention to the list of applications updated and announced—there are a few goodies, this time around.

SETI@Home 2.0
SETI@home is a distributed computing project that scans radio data observed with the Arecibo radio dish in Puerto Rico for signals that might be of extraterrestrial origin. For information on the project, see the SETI@Home Web site at http://setiathome.ssl.berkeley.edu.

A new SETI@Home client for OS/2, version 2.0, is now available at the official download site, http://setiathome .ssl.berkeley.edu/unix.html. Be sure to read the README.os2 file, especially if you've been running earlier versions on a FAT formatted disk.

Ellie
The new release of Ellie, the cutest among all the SETI@home graphical client front ends for OS/2, is out and features support for the latest client, version 2.0, discussed above. It's at www.cee3.demon.co.uk/ellie/ellie_dl.html.

RexxAutoStart
RexxAutoStart 1.5 is a workaround for timing problems that lead to a Workplace Shell hang upon startup on certain OS/2 versions and fix levels. RexxAutoStart gives you a chance to control the order of the programs that automatically start upon bootup, and lets you make any folder your startup folder.

Among other feature enhancements and bug fixes, RexxAutoStart now has support for Object Desktop's autostart features.

RexxAutoStart is available at http://hob-bes.nmsu.edu/pub/os2/util/w ps/rxast150.zip.

RexxAutoStart is free software under the GNU GPL. Source code is included, and source code for the GUI front end is provided upon request.

Nice OS/2 Enhancer
The Nice OS/2 Enhancer is open source software that enables image movement in all windows by means of mouse and keyboard, and modifies frames and controls in OS/2 and Win-OS/2. A Workplace Shell extension adds four "rooms" around the desktop, and enables hot-key definition. Find it at ftp://ftp-os2.nmsu.edu/pub/os2/util/wps /Nice-os2-v31.zip.

ledclock
Andrew Graham (awmg@yesic.com) wrote "a humble clock application" for the Workplace Shell, using bitmaps that load at runtime. Its bitmaps look like those on your microwave oven, with an LED display. Source code is included. It's small, free, and available at www.yesic.com/~awmg /ledclock.html.

Upclient/2
At www.uptimes.net, you can compare your system uptimes with other people around the world. Currently, six hosts are set up on the system, with a maximum uptime of 13 days.

Brian Smith (dbsoft@technologist.com) ported the www.uptimes.net client software to OS/2. The client is on Hobbes at http://hobbes.nmsu.edu/pub/os2/apps/analysis /upclient2.zip.

Names file utility
Source: Sergey Posokhov (abc@posokhov.msk.ru) released version 1.2 of the "Names" file utility. This tool checks files on HPFS drives, and lets you change the case of names, revise differences between file and WPS object names, and change file attributes.

"Names" has a GUI interface and can work with all file managers. Version 1.2 now works with OS/2 Warp Server for e-Business. Find it at http://hobbes.nmsu.edu/pub/os2 /util/disk/Names-v12.zip.

Jad
Jad is a fast Java class decompiler, and it's now available on OS/2.

Jad can be used for recovering classes for which you can't find the source code. It's useful and free. See www.geocities.com/SiliconValley/Bridge/8617/jad.html.
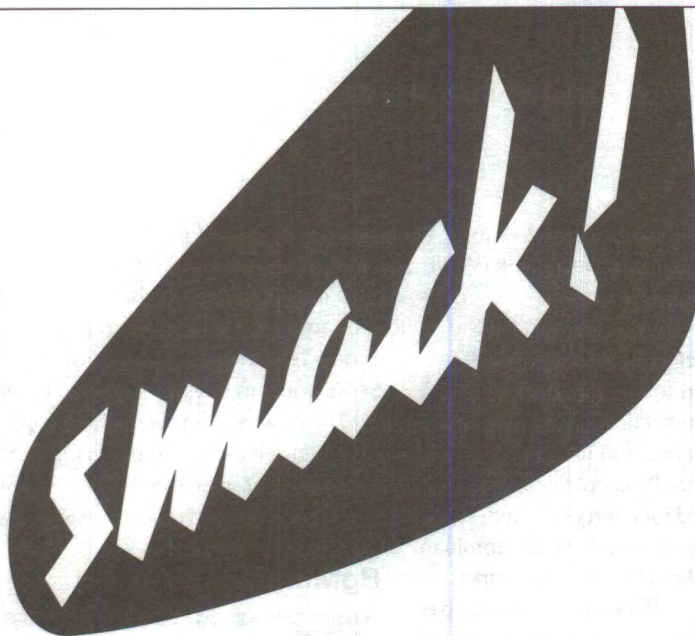
Smack!

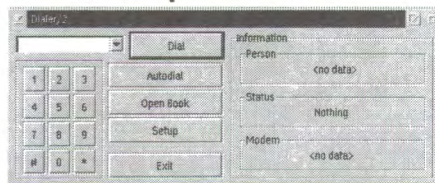*The labeling program for OS/2*

Problem: junk email
Solution: Junk Spy

Junk Spy should be your secret agent
in the war against spam.

www.sundialsystems.com

New OS/2 phone dialer

The Russian Underground has a new English version of a phone dialer, including an address book, called Dialer/2, at `www.os2.spb.ru/software/projects/pm dialer`.

SysInfo/2

Alexey Smirnov (`elf@krovatka.ru`) posted a new SysInfo/2. It's a clone of the SysInfo from Symantec Norton Utilities 3.0 for Windows 95/NT. Using SysInfo/2, you can find info about your CPU, BIOS, hard disk, memory distribution, video and printer subsystems, LAN and Internet connections, OS/2 version and FixPak installed—and so on.

You can find it at `ftp://hobbes.nmsu .edu/pub/os2/util/system/SYSINFO0015.ZIP`.

Church administration

Not every OS/2 application is of general interest—but church secretaries may want to pay attention to this one. Jürgen Danko-weit (`Juergen.Dankoweit@t-online.de`) developed a tool that helps them administer addresses in a church community.

The program uses MySQL, a free SQL server for OS/2, and the data of the Evangelist church computing centers in Germany. Find information at `http://home.t-online .de/home/Juergen`.

InJoy Firewall 1.4

F/X Communications released InJoy Firewall version 1.4. It provides full gateway, firewall, interoperable VPN capability and PPPoE.

The firewall can be installed standalone or used to safely share an Internet connection among multiple workstations, with no reconfiguration of network applications.

You can also use the InJoy Firewall as a stand-alone virtual private network (VPN) client/gateway or PPPoE client.

This version has new support for the PPPoE (PPP over Ethernet) protocol. It includes support for multiple ISP profiles and demand connections, and coexists with IPSec, NAT, filtering and firewall support.

IPSec (Internet Protocol Security) is an Internet standard for interconnected, secure networking devices and is the predominant technology in Virtual Private Networks (VPNs). The IPSec Plugin is released as part of the InJoy Dialer (dial-out), InJoy Connect (dial-in), and the InJoy Firewall. The plugin enables these products to serve as an IPSec gateway or function as a VPN Client.

PPPoE (Point to Point Protocol over Ethernet) specifies how a host PC interacts with a broadband ISP (via xDSL or cable) to achieve Internet access. It relies on two widely accepted standards, namely Ethernet and the point-to-point protocol (PPP). Service providers are implementing PPPoE to replace static IP addressing or DHCP systems that do not offer authentication, billing, or service differentiation.

For additional information, see `www.fx.dk/firewall`.

MIDI Station Sequencer

Christopher Hodges (`cdhodge@ibm.net`) released MIDI Station Sequencer 2.0 Final Edition. MIDI Station Sequencer is an integrated MIDI/Audio sequencer for OS/2 that uses the real-time MIDI subsystem available in OS/2 Warp 4.

It lets you record, playback, and edit MIDI data and audio waveforms. The program has full integration of MIDI and audio in sequences, simultaneous playback of up to 32 waveforms, and direct-to-hard-disk audio playback and recording.

There's plenty more. Read the details at `www.dinosoft.it/~midistation/index.html`.

Gimp 1.1.18

Gimp/2 is a powerful pixel graphic program that runs under Xfree86OS/2 and is part of the GNOME/2 project. Gimp/2 can work with layers and channels, has a bunch of filters, and uses a scripting language called Fu-Script. Together with X-Scanimage and SANE you can directly scan into Gimp/2.

The new version for OS/2, Gimp/2 1.1.8 has been released. Gimp/2 is Open Source, so it's free for everyone to use. Find it at `www.os2.spb.ru/software/xfree86/gimp118`.

BgMetrics
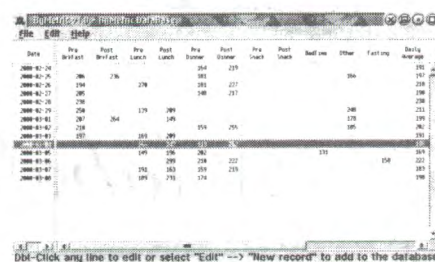
BgMetrics, a native OS/2 solution to track blood glucose readings and dietary information for diabetics, is now publicly available.

BgMetrics tracks Bg readings for specific periods of the day. It tracks meals, "carb" values, and weight. You can see the daily average of Bg readings and daily total carbohydrates, and graph the values.

The author plans to include support for downloading data from selected glucometers and developing the database for other trackable items, such as fat, calories, and A1C readings. Also, if you know of a source of food data from which he can glean fat, calorie, and carbohydrate information for a meal calculator, he'd like to hear from you.

BgMetrics is currently a free application. Download it from `www.pillarsoft.net /bgmetrics.html`.

StWTV

StWTV, a TV viewer for OS/2 users with the WinTV card, is now shareware. You can download it from `http://home.t-online.de /home/stefan.milcke/homepage.htm`.

StWTW has user defined station buttons, free defineable priority of the blitting thread

(for a good frame rate), a REXX API, and GRADD support.

Web Monitor

Web Monitor 1.1 informs you about any problem with your site: availability, performance, or security. It checks your site as often as you like: daily or every minute. The administration is accomplished with a Web browser front end. Download it free from www.ringsys.co.uk/webmonitor/try /InstData/Other/install.zip.

Numerology for OS/2

Magnus Olsson, the developer of WarpCalc and Astrology, released Numerology 1.0 for OS/2. It's a very simple implementation of basic Chaldean numerology. Find it at www.visdom.nu/home/numerolog.

DIA

DIA is a Visio-like diagraming program. It has the normal simple vector drawing tools (such as rectangles, circles, text, and pixel graphics), specific features for diagrams (like connection lines) and a useful symbol list. Version 0.8.4 of DIA has been released for OS/2; this version runs in every color depth. Find more information at http://birdy .hpage.net or http://birdy.hpage.de.

Cryptlib

Cryptlib is a security toolkit which allows programmers to add encryption and authentication services to their software. According to the publisher, the high-level interface provides anyone with the ability to add strong security capabilities to an application in as little as half an hour. Best of all, they claim, you don't need to know the low-level details which make the encryption or authentication work.

Cryptlib provides a transparent and consistent interface to security services and algorithms. Included as core components are implementations of the most popular encryption and authentication algorithms.

Cryptlib also provides full X.509 certificate handling, with support for all X.509v3 and IETF PKIX certificate features. It also supports SET, Microsoft AuthentiCode, S/MIME, and SSL client and server certificates, handling certification requests.

To complement its key management capabilities, cryptlib provides a complete S/MIME implementation, allowing email, files, and EDI transactions to be authenticated with digital signatures and encrypted in an industry-standard format.

Cryptlib can make use of the crypto capabilities of a variety of external devices such as hardware crypto accelerators, Fortezza cards, PKCS #11 devices, and crypto smart cards.

cryptlib is supplied as source code for OS/2, Unix (static and shared libraries), DOS, Windows 3.x, Windows 95/98, Windows NT, BeOS, and the Tandem environ-

ment, and also as 16- and 32-bit Windows DLLs. Adaptations also exist for VM/CMS and MVS mainframe environments.

For more information, visit www.cs .auckland.ac.nz/~pgut001/cryptlib.

Porting project

The following message was posted to Warpcast, an email list and Web site where OS/2 users frequently post news and rumors (www.warpcast.com).

In the following, you will read about a project which aims to help people in porting and writing portable software on OS/2.

Current situation: While most commercial software development for OS/2 has stopped (except important server-only and large-scale solutions), the "open source" movement is gaining momentum. For most remaining individual OS/2 users and developers it is essential to profit from this momentum in the best possible way.

For many years, EMX has been the workhorse here, and not only because of its gcc compiler port. EMX's highly portable, largely open, standards conforming C library has proved its reliability and excellence. Let us OS/2 users extend it slowly, implementing the interfaces we have been missing, without reducing stability, slickness, and performance. Like EMX itself, the C library should serve well as an example of good software engineering.
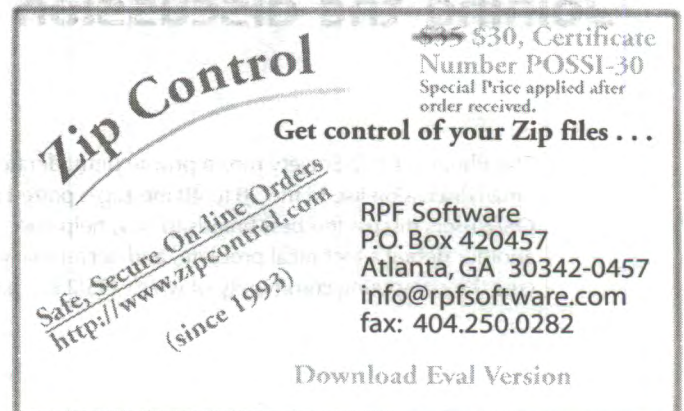
In the following, we outline an approach which follows a well known theorem from physics, the "least action principle." In our opinion, the rather low resource demands makes this project likely to succeed!

Our idea focuses on three independent steps:

1. Collect the ported APIs and subsets that already exist, and make a usable and well documented extension library that can be improved upon and heavily tested, independently from emx.
2. Create a Posix-conformant file-system wrapper using a _posixRedirRoot() function similar to the existing __XOS2RedirRoot() interface of XFree86, as well as a BSD-Unix-style (paths.h) mechanism for remapping hardcoded path-names. Other ideas (not necessarily from the authors here) include an "emx.dll" internal database to simulate symlinks.
3. Merge all those efforts into a single distribution that is upward-compatible to already existing emx-software and that would (eventually) pass all tests for official Posix-conformance.

We would not limit the scope to POSIX.1. We would include a selection of system calls from The Single Un*x Specifications (Unix 95/98), as well as traditional SYSV and BSD interfaces.

What to do: As a first step we'd like to know if people want to contribute. And, if so, what they have to offer. Let us set up a mutual coordination of past individual efforts to merge them to a usable single library. Much complicated work has already been accomplished, namely to support the forthcoming XFree86 4.0. You might already have implemented other complicated and missing APIs. Contribute them, please! And feel free to criticize and to stress test what we already offer.

Then, we might have to discuss the license issue. A license more liberal than (L)GPL would be nice, since we don't want to limit usage more than necessary. This does not exclude a non-liability-disclaimer and individual copyright notices. If possible, we might agree on a unique license for the whole package. (The small collection we are offering in a package called "libextensions" is public domain, except for some (L?)GPL stuff which will be removed eventually.)

Finally, we have to address what to do with our work. As explained, it may not simply be added to the public emx distribution.

We have already collected a few implementations for "frequently missing APIs" upon porting, including math and random number functions, g/sitimer(), dlopen(), etc. To be prepared for possible future enhancements we also provide stubs for functions which have no real OS/2 counterpart yet.

We do not intend to advertise your hard work claiming it as our effort. Our goal is to get emx (or any similar project) ready for porting more software out of the box!

Primarily, we're looking for people who will actually contribute code. This little project shouldn't go fully public (i.e. uploaded to Hobbes) unless a certain level of quality and quantity is reached.

We've learned from many projects that users get upset when too much technical stuff is discussed. So we have set up a new discussion list at posix2@borneo.gmd.de. Send subscribe requests to majordomo @borneo.gmd.de. They will be forwarded to the list owner for approval. ☻

Joining the discussion

The Phoenix OS/2 Society runs a private unmoderated email discussion list. In the 20 to 40 messages posted daily, OS/2 users discuss the best brands to buy, help one another debug a technical problem, and occasionally discuss the computing community of which OS/2 is a part.

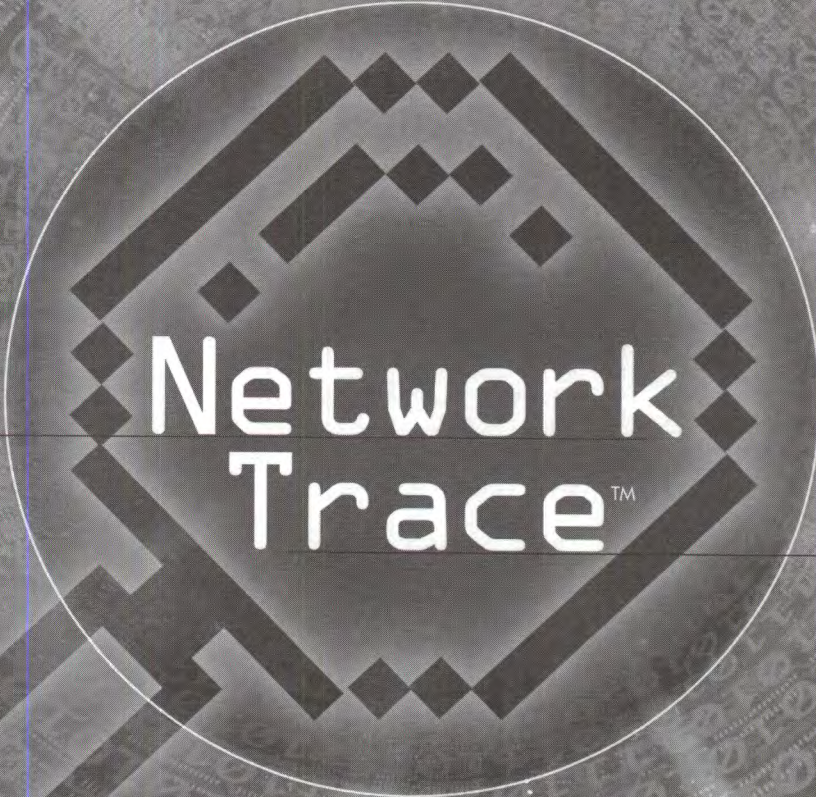To join the list, fill out the form at www.possi.org /lists.html.

While there's no requirement that participants be a member of the Society, it's generally expected that the people who use the service will support it financially. ☻

Join the Phoenix OS/2 Society

We're the largest international organization supporting OS/2 users, OS/2 software developers, and OS/2 friends. (Not even IBM can say that — they don't support OS/2 users!) When you become a member of the Society, you get:

- A subscription to our award-winning magazine, extended attributes
- Access to discounts and special offers to members
- Free access to our email listserv
- A chance to take part in various Society events
- The knowledge that you're not alone in a sea of Windows users

You can join by filling in and mailing the card in the center of the magazine. Or you can join online by going to http://www.possi.org/mem.html and following the links to BMT.

Don't miss out — join today!

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